

REMARKS

Pursuant to the non-final Office Action mailed July 27, 2007, which has been carefully considered, Applicants respectfully request reconsideration. To further the prosecution of this application, each of the issues raised in the non-final Office Action is addressed herein. Claims 10-17 are currently pending in this application, of which Claim 10 is an independent claim. The application as presented is believed to be in allowable condition.

A. Claim Rejections under 35 U.S.C. §102(e)

Claims 10-17 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,991,402 (*Burkhart*). Applicants respectfully traverse.

The present invention, as defined by independent Claim 10, is directed to a method for constructing an intermediate wall, having an upper fixing type structure, of a three arch excavated tunnel, in which lining concrete is cast and fixed to an upper side of the intermediate wall, a lower portion of the intermediate wall has a small thickness reduced as much as the thickness of the lining concrete, and the lower portion of the intermediate wall is one type selected from the group consisting of a column type, an arch type and an intermediate wall type.

The Office Action cites *Burkhart* for disclosing "a variety of tunneling structures formed from concrete, the structures including a drainage system ([inlet ports] 8 and [side inlet ports] 9), an upper portion of the wall using a drain board (the perforated top/roof member) and a waterproof layer (col. 20, lines 56 through 57), and further including a collection tank and drain pipes".

However, it is submitted that the cited sections of *Burkhart* do not disclose that "a lower portion of the intermediate wall has a small thickness reduced as much as the thickness of the lining concrete", as required by Claim 10. Rather, *Burkhart* discloses modules for retaining water beneath a ground surface, in which the modules include a substantially

continuous deck portion (12) with inlet ports 8 formed therein and side portions (13). (*Burkhart Figs. 1-4; col. 5, line 36 to col. 9 line 21*). The side portions and the deck form a channel through which water can flow. (*Id.*). The modules of *Burkhart* can be placed side-by-side or end-to-end so that adequate drainage is provided to a specified area, such as a parking lot. Figures 10-13 of *Burkhart* depict various ways of connecting the modules where the deck portions are supported by the side portions. However, at no point does *Burkhart* disclose that a lower portion of the intermediate wall has a small thickness reduced as much as the thickness of the lining concrete. In addition, *Burkhart* fails to disclose an upper fixing type structure, of a three arch excavated tunnel or that the lower portion of the intermediate wall is one type selected from the group consisting of a column type, an arch type and an intermediate wall type.

Applicants respectfully note that in order to support a claim of *prima facie* anticipation, a single reference must teach or enable each of the claimed elements as arranged in the claim interpreted by one of ordinary skill in the art. However, nothing in the art of record discloses each of the features recited in Claim 10.

The intermediate wall of the present invention advantageously serves as a supporting member so that the distance between two main tunnels can be reduced in contrast to conventional tunnels. In addition, the claimed invention has the advantages of reducing an area of a site for subways, trains, or roads so that the economic efficiency of construction is improved, solving problems caused by conventional two arch tunnels, and increasing the stability of the tunnel structure.

Applicants respectfully submit that Claims 11-17, which ultimately depend from Claim 10, are patentable over the art of record by virtue of their dependence. Further, Applicants submit that Claims 11-17 define additional patentable subject matter in their own right. Therefore, it is respectfully requested that the rejection of Claims 10-17 under 35 U.S.C. §102 be reconsidered and withdrawn.

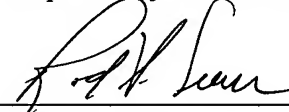
Applicants: Seo et al.
Serial No.: 10/534,521
Filing Date: May 11, 2005
Docket No.: 673-27 PCT/US
Page 10

CONCLUSION

Favorable reconsideration of Claims 10-17 and allowance of pending Claims 10-17 are solicited.

In view of the foregoing remarks, the subject application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this Reply, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number provided below to discuss any outstanding issues.

Respectfully submitted,



Rod S. Turner
Registration No.: 38,639
Attorney for Applicants

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(516) 822-3550
RST:mak